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**AMENDED APPLICATION (ARTICLE 34)**

**TITLE: SEMICONDUCTOR MEMORY CARD, AND  
ACCESSING DEVICE AND METHOD**

## (Amended) CLAIMS

1. (Amended) A semiconductor memory card which is used in connecting to an access device, comprising:
  - 5 a host interface which transmits a control signal and data to the access device and receives a signal from the access device;
  - a nonvolatile memory in which a plurality of continuous sectors are grouped into an erase block as a minimum unit for data erasing and which includes an address management information area and user data area;
  - 10 a memory controller which controls erasing, writing and reading of data for said nonvolatile memory;
  - a memory for a card information storage including a card information storage part which stores information on access condition as condition at least at the time when said access device accesses said semiconductor memory card and access performance which said semiconductor memory card realizes when said access device performs access on said access condition, and
  - 15 a control part which controls each part on the basis of the control signal acquired via said interface.

2. (Amended) The semiconductor memory card according to claim 1, wherein said card information storage part

stores

first information on physical characteristics of in  
said semiconductor memory card, and at least one of  
second information on access condition,

5 third information on said access rate of said  
semiconductor memory card as information on said access  
performance, and

fourth information on abnormal process of said  
semiconductor memory card.

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3. The semiconductor memory card according to claim  
2, wherein said third information in said card information  
storage part includes

a flag representing rate performance of said  
15 semiconductor memory card as said information on access  
rate.

4. (Amended) The semiconductor memory card according  
to claim 1, wherein said card information storage part  
20 stores at least

first information on physical characteristics in said  
semiconductor memory card,

second information on said access condition, and  
third information on access rate of said  
25 semiconductor memory card as information on said access

performance.

5. The semiconductor memory card according to claim  
4, wherein

5        said control part, in response to a request from said  
access device, reads information on access condition for  
accessing said semiconductor memory card, and information  
on access rate when accessing to said semiconductor memory  
card on said access condition from said card information  
10      storage part, and transmits the information to said access  
device.

6. The semiconductor memory card according to claim  
4, wherein

15      said control part, in response to information on  
access condition designated by said access device, reads  
information on access rate when accessing the semiconductor  
memory card on said access condition from said card  
information storage part, and transmits the information to  
20      said access device.

7. The semiconductor memory card according to claim  
4, wherein

25      said control part, in response to information on  
access rate designated by said access device, reads

information on access condition to said semiconductor memory card required to meet said access rate from said card information storage part, and transmits the information to said access device.

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8. The semiconductor memory card according to claim 4, wherein

10       said control part, when reading information on access condition designated by said access device and information on access rate from said card information storage part and accessing said semiconductor memory card on said access condition, determines whether or not the access rate is met and transmits a determination result to said access device.

15       9. The semiconductor memory card according to claim 4, wherein the third information in said card information storage part includes

20       a flag representing rate performance of said semiconductor memory card as said information on access rate.

10. The semiconductor memory card according to claim 4, wherein

25       said card information storage part has information on access rate of said semiconductor memory for a plurality of

levels of power consumption of said semiconductor memory card as said third information, and

    said control part, in response to a request from said access device and designation of power consumption level,

5     reads information on access condition for accessing said semiconductor memory card and information on access rate when accessing said semiconductor memory card on said access condition from said card information storage part, and transmits the information to said access device.

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11. The semiconductor memory card according to claim 4, wherein

    said card information storage part has information on access rate of said semiconductor memory for a plurality of 15 levels of power consumption of said semiconductor memory card as said third information, and

    said control part, in response to information on access condition designated by said access device and designation of power consumption level, reads information 20 on access rate when accessing said semiconductor memory card on said access condition and designated electrical power consumption level from said card information storage part, and transmits the information to said access device.

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12. The semiconductor memory card according to claim

4, wherein  
said card information storage part has information on  
access rate of said semiconductor memory for a plurality of  
levels of power consumption of said semiconductor memory  
5 card as said third information, and  
said control part, in response to information on  
access rate designated by said access device and  
designation of power consumption level, reads information  
on access condition to said semiconductor memory card  
10 required to meet said access rate from said card  
information storage part, and transmits the information to  
said access device.

13. The semiconductor memory card according to claim  
15 4, wherein  
said card information storage part has information on  
access rate of said semiconductor memory for a plurality of  
levels of power consumption of said semiconductor memory  
card as said third information, and  
20 said control part reads information on access  
condition designated by said access device and information  
on designation of power consumption level and access rate  
from said card information storage part, determines whether  
or not said access rate is met when accessing said  
25 semiconductor memory card on said access condition and

designated electrical power level, and transmits a determination result to said access device.

14. The semiconductor memory card according to claim  
5 1, wherein

said card information storage part has an access performance basic information list which holds various process time and process unit size in said semiconductor memory card according to an access method, and

10 in response to a request from said access device, said control part transmits said access performance basic information list to said access device.

15. The semiconductor memory card according to claim  
15 1, wherein said card information storage part

holds process unit size of said semiconductor memory card, access method and access rate in the case where access condition containing process contents are changed, and

20 in response to request of said access device, said control part transmits information on said access rate to said access device.

16. (Amended) An access device for accessing a  
25 semiconductor memory card in which a plurality of

continuous sectors are grouped into a block as a minimum unit for data erasing and stored data is managed according to a file system comprising:

- a card information acquisition part for acquiring
- 5 information on access condition as condition at the time  
when said access device accesses said semiconductor memory  
card and access performance which said semiconductor memory  
card realizes when said access device performs access on  
said access condition from said semiconductor memory card;
- 10 a card use condition storage part for storing  
information on access condition which can be used when said  
access device accesses said semiconductor memory card and  
information on access rate desirable for said semiconductor  
memory card;
- 15 an access condition determination part for  
determining access condition on the basis of the  
information acquired by said card information acquisition  
part, information on access performance of said  
semiconductor memory card and information stored in said  
20 card use condition storage part;
- a file system control part for acquiring access  
condition determined by said access condition determination  
part and performing file access suitable for said access  
condition; and
- 25 an access control part for accessing said

semiconductor memory card in response to an access request from said file system control part.

17. The access device according to claim 16, wherein  
5 said access condition determination part divides an area of said semiconductor memory card in file system access units (hereinafter referred to as FS access unit) on the basis of the information on access performance acquired from said semiconductor memory card.

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18. The access device according to claim 17, wherein said file system control part, when recording file data on said semiconductor memory card, determines a continuous free area having a length of multiples of said FS access unit on the basis of management information of a file system constructed on said semiconductor memory card, and records the file data in said determined continuous free area.

20 19. The access device according to claim 17, wherein said file system control part, when recording new file management information on said semiconductor memory card, determines whether or not another file management information is recorded in the area of said FS access unit 25 on the basis of management information of the file system

constructed on said semiconductor memory card and a free area for writing new file management information therein exists, and when the free area exists, determines said free area as a writing position of file management information,  
5 and records the file management information in said determined free area.

20. The access device according to claim 17, wherein  
said file system control part, when the areas of a  
10 plurality of said FS access units are partially used, moves data in the used areas of partially used FS access units to an unused area of the other FS access unit on the basis of management information of a file system constructed on said semiconductor memory card.

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21. The access device according to claim 17, wherein  
said file system control part calculates the number of areas in which the whole of said FS access unit is the free area on the basis of management information of the  
20 file system constructed on said semiconductor memory card.

22. (Amended) An access method for accessing a semiconductor memory card in which a plurality of continuous sectors are grouped into a block as a minimum unit for data erasing and stored data is managed according  
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to the file system comprising:

a card use condition storage step for storing information on access condition which can be used when accessing said semiconductor memory card and information on 5 access rate desirable for said semiconductor memory card;

a card information acquisition step for acquiring information on access condition as condition at the time when said access device accesses said semiconductor memory card and access performance which said semiconductor memory 10 card realizes when said access device performs access on said access condition from said semiconductor memory card;

an access condition determination step for determining access condition on the basis of the information acquired in said card information acquisition 15 step and information stored in said card use condition storage step; and

a file system control step for acquiring access condition determined in said access condition determination step and accessing a file in said semiconductor memory card 20 so as to meet said access condition.

23. The access method according to claim 22, wherein said access condition determination step determines a file system access unit (hereinafter referred to as FS access 25 unit) as a size used when accessing said semiconductor

memory card according to said access condition.

24. The access method according to claim 23, wherein  
when recording file data on said semiconductor memory  
5 card, said file system control step determines a continuous  
free area having a length of multiples of said FS access  
unit on the basis of management information of the file  
system constructed on said semiconductor memory card, and  
the file data is recorded in said determined  
10 continuous free area.

25. The access method according to claim 23, wherein  
when recording new file management information on  
said semiconductor memory card, said file system control  
15 step determines whether or not another file management  
information is recorded in the area of said FS access unit  
on the basis of management information of the file system  
constructed on said semiconductor memory card and a free  
area for writing new file management information therein  
20 exists, and

when the free area exists, said space area is  
determined as a writing position of file management  
information and records the file management information in  
said determined free area.

26. The access method according to claim 23, wherein  
when the areas of a plurality of said FS access units  
are partially used, said file system control step moves  
data in the used areas of partially used FS access units to  
5 an unused area of the other FS access unit on the basis of  
management information of the file system constructed on  
said semiconductor memory card.

27. The access method according to claim 23, wherein  
10 said file system control step calculates the size of  
an area in which the whole of said access unit is a free  
area on the basis of management information of the file  
system constructed on said semiconductor memory card, and  
the calculated value is informed as a free area  
15 length of said semiconductor memory card to an application  
program.